To: Myers, Craig[Myers.Craig@epa.gov]; Dhieux, Joyel[Dhieux.Joyel@epa.gov]
Cc: Wall, Dan[wall.dan@epa.gov]; Ostrander, David[Ostrander.David@epa.gov]; Jan Christner (Jan.Christner@WestonSolutions.com)[Jan.Christner@WestonSolutions.com]; Williams, Laura[williams.laura@epa.gov]
From: Way, Steven
Sent: Tue 9/1/2015 1:22:08 PM
Subject: FW: Bullet Points
Considerations for Optimizing Interim Ponds System.docx

The metals concentrations are going to change as flows in the tributary drainages drop. The impact of the GK discharge if it remains steady, will be become a more significant portion of the total load. Is it worth our treating for that marginal difference is the question.

It is possible that some projections / modeling could be used to estimate that potential changes in flow and associated concentrations at Bakers Bridge. Obviously the impact from Cement creek to A72 and much of the canyon has long been established – over the last 8 – 10 years.

This analysis needs to be considered to assist with resolving this question of treating water through the year.

We have very little time to make some decisions about piping and treatment technology and equipment. If the funding for this is uncertain, we need hold off on any subcontract proposals that are awaiting our decision.

Steve

Steven Way

Federal On-Scene Coordinator

Emergency Response Unit

US EPA - Region 8

1595 Wynkoop Street

Denver, CO 80202

Office: 303-312-6723

From: Christner, Jan [mailto:Jan.Christner@WestonSolutions.com]
Sent: Monday, August 31, 2015 5:25 PM
To: Oller, Megan
Cc: Way, Steven
Subject: Bullet Points

See the attached bullet points. They assume that improvements in the interim ponds would only result in 10% reduction in concentrations at A72 and Bakers Bridge. Additional contaminant removal would be expected from a more extensive treatment system than ponds, thereby making the below points moot when considering the impact of installing a more effective treatment system.

Considerations for Optimizing Interim Ponds System

•□□□□□□□□ Metals concentrations at A72 exceed the chronic cadmium water quality standard (WQS), acute and chronic zinc WQS, and acute aluminum WQS.

o For all of these contaminants, the concentrations are not out of range of concentrations observed during non-flow from 2009-2014.

o Assuming 10% of the current load could be reduced by improving the interim pond system, the same WQS would still be exceeded.

•□□□□□□□□ Metal concentrations at Bakers Bridge exceeded the chronic WQS for cadmium. One of 4 pre-spill samples also exceeded the chronic WQS for cadmium. The elevated pre-spill cadmium concentration was greater than most of the detected concentrations since the spill.

o Assuming 10% of the current load could be reduced by improving the interim pond system, the cadmium WQS would still be exceeded.

•□□□□□□□□ Detection limits are greater than the WQS for arsenic and mercury so no conclusions can be drawn regarding those contaminants.